II. CLAIMS

1. (Previously Presented) A polynucleotide directed towards a gene of a catalytic subunit of human telomerase, wherein the polynucleotide specifically binds with the mRNA of the catalytic subunit of human telomerase in a target sequence region selected from the group consisting of region 2206-2225 (SEQ. ID NO 4) and region 2331-2350 (SEQ. ID NO 8), inhibits human telomerase expression and where the polynucleotide is an antisense oligonucleotide complementary to the target sequence region.

2. (Previously Presented) The polynucleotide according to claim 1, wherein the polynucleotide contains a oligonucleotide sequence selected from the group consisting of SEQ ID NO 10 and SEQ ID NO 13.

3. Cancelled

4. (Previously Presented) The polynucleotide according to claim 1, wherein the polynucleotide is immobilized on a carrier selected from the group consisting of porous gels, aluminum oxide, bentonite, agarose, starch, nylon and polyacrylamide.

5-7. Cancelled

8. (Previously Presented) The polynucleotide according to claim 1, wherein the antisense oligonucleotide is modified by phosphothioate bonds.

9. Cancelled

10. (Previously Presented) A composition comprising a polynucleotide according to claim 1 in combination with a pharmaceutically tolerable carrier.

11. (Previously Presented) A kit comprising: a polynucleotide according to claim 1 and a pharmaceutically tolerable carrier.

12. Cancelled

13. (Withdrawn) Method for diagnosis, prophylaxis, therapy, follow-up and/or aftercare of diseases associated with cell growth, differentiation and/or division, comprising using a polynucleotide according to claim 1, optionally in combination with a pharmaceutically tolerable carrier.

14. (Withdrawn) The method according to the preceding claim, wherein the disease is a tumor.

15. (Withdrawn) The method according to claim 14, wherein the tumor is a solid tumor or a leukemia.

16. (Withdrawn) The method according to claim 15, wherein the solid tumor is a tumor of the urogenital tract and/or gastrointestinal tract.

17. Canceled.

18. Canceled.

19. (Withdrawn) The method according to claim 16, wherein the

tumor of the urogenital tract is a bladder carcinoma and/or a metastase of said tumor.

20. (Withdrawn) The method according to claim 13, wherein the follow-up is monitoring the effectiveness of an anti-tumor treatment.

21. (Withdrawn) The method according to claim~~s~~ 13 wherein the polynucleotide is used in a combination therapy.

22. Canceled.

23. (Withdrawn) The method according to claim 22, wherein the combination therapy comprises an adjuvant biologically specified form of therapy.

24. (Withdrawn) The method according to claim 23, wherein said form of therapy is an immune therapy.

25. (Withdrawn) The method according to claim~~s~~ 21, wherein the combination therapy is a gene therapy and/or a therapy using a polynucleotide against the same or other target molecule.

26. (Withdrawn) The method according to claim~~s~~ 13 for increasing the sensitivity of tumor cells to cytostatic agents and/or radiation.

27. (Withdrawn) Method for inhibiting the vitality, the proliferation rate of cells, for inducing apoptosis and/or cell cycle arrest comprising the step of using a polynucleotide according to claim 1.

28. (New) A polynucleotide directed towards a gene of a catalytic subunit of human telomerase, wherein the polynucleotide specifically binds with the mRNA of the catalytic subunit of human telomerase in a target sequence consisting of region 2206-2225 (SEQ. ID NO 4), inhibits human telomerase expression and where the polynucleotide is an antisense oligonucleotide complementary to the target sequence region.

29.(New) The polynucleotide according to claim 1, wherein the polynucleotide contains a oligonucleotide sequence selected from the group consisting of SEQ ID NO 10.

30. (New) A polynucleotide directed towards a gene of a catalytic subunit of human telomerase, wherein the polynucleotide specifically binds with the mRNA of the catalytic subunit of human telomerase in a target sequence region consisting of region 2331-2350 (SEQ. ID NO 8), inhibits human telomerase expression and where the polynucleotide is an antisense oligonucleotide complementary to the target sequence region.

31.(New) The polynucleotide according to claim 1, wherein the polynucleotide contains a oligonucleotide sequence consisting of SEQ ID NO 13.